

Amendments to the Specification:

Please replace the paragraph beginning on page 1, at line 11 with the following rewritten paragraph:

In an imaging system, the areas of the image sensing device receiving no incident light should be reproduced as black in the displayed image, such as a photographic print or an image on a CRT monitor.

Photographic prints are often of objectionable quality if areas of the image that should be black are lighter ~~then than~~ black. This problem is referred to as the “smoky black” problem because such images have an appearance that areas or objects that should appear dark or black appear too light. For example, consumer photographs of fireworks generally contain large regions with little or no light exposure. Fireworks images are often printed too light, resulting in images with smoky black or gray backgrounds which are not satisfactory.

Please replace the paragraph beginning on page 6, at line 17 with the following rewritten paragraph:

D_{min} describes the expected density of the photographic film in areas receiving no light exposure. In the preferred embodiment, the D_{min} is determined by sensing an identification code on the photographic film. The identification code is then employed to address a database that contains the D_{min} value. The database may be created ahead of time, using manufacturer's specifications for the specific photographic film. In an alternative embodiment, as shown in Fig. 2, a scanner may be used to scan an interframe gap **22**, (i.e. the film between adjacent image frames **26**, or the inter-perforation ~~gap 24~~ gap 24). Typically, areas between frames of a photographic film that receive little or no light exposure. Therefore, scanning these areas provides a good estimate of the film's D_{min} . These methods of determining D_{min} are well known by those skilled in the art, such as described in US Patents 5,081,485 and 5,134,573, referenced above. As an example, the D_{min} for a Kodak 200 speed film for the red, green, and blue channels are 212, 616, and 779, respectively, in units of density * 1000. The D_{min} is determined by using information not contained in any digital representation of the image itself, such as the identification code or the interframe gap scanning as described above.

Please replace the paragraph beginning on page 10, at line 7
with the following rewritten paragraph:

Referring to Fig. 4, an example image processing path **10_i** is shown. This exemplary image processing path **10_i** composed of image transforms ~~20_m~~-designed to create an output image which is a photographic print from an input image which is a digital scan of a photographic negative. Examples of such image processing paths **10_i** are disclosed in US Patents 6,097,470 and 6,097,471, both issued August 1, 2000 to Buhr et al., which are incorporated herein by reference. The image processing path includes an imaging device response linearizer **42** that applies compensation for non-linearities in the response of the imaging device. A method of correcting for the non-linearities in the response of photographic film may be implemented if the digital image is of film origin. Such a method is described in US Patent 5,134,573 issued July 28, 1992 to Goodwin, which is incorporated herein by reference. The image processing path also includes -a balance applicator **44** that applies a scene balance algorithm to the image. Image balancing is often performed by a scene balance algorithm (SBA) or automatic exposure determination algorithm (such as are used in high speed optical printers or in a Photo-CD scanner, see for example US Patent 4,945,406 issued July 31, 1990 to Cok, which is incorporated herein by reference). Also, the image processing path includes a contrast ~~adjuster~~ adjustor **46** that determines and applies tonal modifications to the image. The contrast of the image may be estimated by an automatic algorithm. In addition, the contrast of the digital image may likewise be modified to a preferred level of contrast. An example of an algorithm that estimates image contrast and provides a means of adjusting the contrast of the image is described in US Patent 5,822,453, issued October 13, 1998 to Lee et al., which is incorporated herein by reference. Finally, the image processing path **10_i** also includes a ~~renderer~~ rendering operation **48** such as described in US Patent No. 6,097,470, referenced above. Rendering either a digital or optical image can with good accuracy be represented by a LUT (either one, three, or multi- dimensional.) For example, Fig. 5 shows the graph of a LUT which relates image densities (scene densities) to densities of the output media of

the output image. The metric of the output image is preferably Status A * 100, although those skilled in the art will recognize that many output image metrics may be used as the rendering space (for example, sRGB is common.)